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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,709	09/17/2003	Kevin Duesman	M4065.0714/P714	2232

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EXAMINER

LEE, MICHAEL

ART UNIT	PAPER NUMBER
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2622

DATE MAILED: 08/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/663,709	Applicant(s) DUESMAN ET AL.	
	Examiner M. Lee	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-65 is/are pending in the application.
- 4a) Of the above claim(s) 52-56 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-25 and 37-45 is/are allowed.
- 6) ☒ Claim(s) 1-16, 26-36, 46-51, 57-65 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/17/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-14, 16, 26-34, 36, 46-51, and 57-65 are rejected under 35 U.S.C. 102(b) as being anticipated by Pappas et al. (5,818,572).

Regarding claim 1, Pappas discloses a two-dimensional modulation transfer function measurement technique showing an image sensor 10 for receiving light from light sources 30 and 32 through light mask 26, which meets the exposing step as claimed, a A/D converter 22, a frame grabber 46, and noise processing module for converting the sensed signals by sensor 26, both masked and unmasked, to digital signals, which meet the measuring step as claimed, and a MTF processing unit 40, which meets the calculating step as claimed.

Regarding claim 2, see Figure 2.

Regarding claim 3, see Figure 3.

Regarding claim 4, see column 3, lines 7-8.

Regarding claim 5, see col. 4, lines 22-26.

Regarding claim 6, see col. 3, lines 48-52.

Regarding claim 7, the mask in Pappas is intended to form at any time.

Regarding claims 8-11, see col. 4, lines 56-67.

Regarding claim 12, the frame-averaging step in the noise-processing module meets the first and second column output averaging steps as claimed.

Regarding claim 13, see col. 4, line 6.

Regarding claim 14, see col. 4, lines 26-36.

Regarding claim 16, see col. 3, lines 13-14.

Regarding claims 26-34, 36, 46-51, and 57-65, see corresponding rejections as set forth above.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pappas et al. (5,818,572).

Regarding claims 1 and 35, Pappas does not specify the CMOS imager as claimed. However, Pappas teaches that the electro-optical sensor 10 under test could be any conventional image sensor (col. 3, lines 6-19). Hence, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to employ a CMOS imager as the sensor to perform the well known functions as claimed.

Allowable Subject Matter

5. Claims 17-25, and 37-45 are allowed.

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6. The following is a statement of reasons for the indication of allowable subject matter: Prior art does not specify the exposing steps, the measuring steps, the comparing step, and the determining step as claimed.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 6 and 31 each recite the limitation "said imager" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Blane et al. (5,651,076) shows an opaque surface for a measuring system.

Frost et al. (5,621,519) shows a transfer function measuring system.

Alderson et al. (6,900,884) shows an optical system under test.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Lee whose telephone number 571-272-7349. The examiner can normally be reached on Monday through Thursday from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Ometz, can be reached on 571-272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to be 'M. Lee', with a stylized, flowing script.

M. Lee
Primary Examiner
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